

SEQUENCE LISTING

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<120> NUCLEIC ACID CONSTRUCT CONTAINING FULL LENGTH GENOME OF HUMAN
HEPATITIS C VIRUS ... AND METHOD OF PRODUCING HEPATITIS C VIRUS
PARTICLE

<130> 1254-0321PUS1

<140> US 10/589,902

<141> 2006-08-17

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<151> 2005-02-21

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<151> 2004-02-20

<160> 26

<170> PatentIn Ver. 2.1

<210> 1

<211> 340

<212> RNA

<213> Hepatitis C virus

<220>

<221> misc_feature

<222> (1)..(340)

<223> 5' non-translated region of hepatitis C virus genomic RNA
derived from JFH-1 clone

<400> 1

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ccccucccg ggagagccau aguggucugc ggaaccggug aguacaccgg aaugccggg 180
aagacugggu ccuuucuuug auaaaccac ucuaugcccg gccauuuggg cgugcccccg 240
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<210> 2

<211> 573

<212> RNA

<213> Hepatitis C virus

<220>

<221> misc_feature

<222> (1)..(573)

<223> core protein-coding sequence of hepatitis C virus genomic RNA

derived from JFH-1 clone

<400> 2

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ggccccaggu ugguugugcg cacgacaagg aaaacuucgg agcgguccca gccacguggg 180
agacgccagc ccauccccaa agaucggcgc uccacuggca aggccugggg aaaaccaggu 240
cgccccuggc ccuauauagg gaaugaggga cucggcuggg caggauaggcu ccuguccccc 300
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ggcgccccgc uuaguggcgc cgccagagcu gucgcgcacg gcgugagagu ccuggaggac 480
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cuguuguccu gcaucaccgu uccggucucu gcg 573
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<211> 576

<212> RNA

<213> Hepatitis C virus

<220>

<221> misc_feature

<222> (1)..(576)

<223> E1 protein-coding sequence of hepatitis C virus genomic RNA
derived from JFH-1 clone

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guggggaaua cgucacggug uugggugcca gucucgcca acauggcugu gcggcagccc 180
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aucgucucgc cgcaguacca cugguuugug caagaugca auugcuccau cuaccucggc 360
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augauccugg cguacgugau gcgcgucgcc gaggucauca uagacaucgu uagcggggcu 480
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<210> 4

<211> 1290

<212> RNA

<213> Hepatitis C virus

<220>

<221> misc_feature

<222> (1)..(1290)

<223> E2 protein-coding sequence of hepatitis C virus genomic RNA
derived from JFH-1 clone

<400> 4

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cguacugccu ugaauugcaa ugacuccuug aacaccggcu uucucgcggc cuuguucuac 180
accaaccgcu uuaacucguc agggugucca gggcgccugu ccgccugccg caacaucgag 240
gcuuuccgga uagggugggg caccuacag uacgaggaua augucaccaa uccagaggau 300
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cguggagugc ccaccuacac auggggagag aaugagacag augucuuccu acugaacagc 480
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aagacuugug gcgcgccacc uugccgcacc agagcugacu ucaacgccag cacggacuug 600
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<210> 5

<211> 651

<212> RNA

<213> Hepatitis C virus

<220>

<221> misc_feature

<222> (1)..(651)

<223> NS2 protein-coding sequence of hepatitis C virus genomic RNA
derived from JFH-1 clone

<400> 5

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cugacccugg gggagccau gauucaggag uggguaccac ccaugcaggu gcgcggcggc 180
cgcgauaggc ugcgugggc cgucacuaua uucugcccgg gugugguguu ugacauuacc 240
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ccguacuucg ucagagcuca cgcucugaua aggguaugcg cuuuggugaa gcagcucgcg 360
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uagaccacc ucacaccuau gucggacugg gccgcuaugc gccugcgcga cuuagcgguc 480
gccguggaac ccaucaucu caguccgaug gagaagaagg ucaucgucug gggagcggag 540
acggcugcau guggggacau ucuacaugga cuucccgugu ccgcccga cu gggccaggag 600
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<210> 6

<211> 1893

<212> RNA

<213> Hepatitis C virus

<220>

<221> misc_feature

<222> (1)..(1893)

<223> NS3 protein-coding sequence of hepatitis C virus genomic RNA
derived from JFH-1 clone

<400> 6

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aacaagacuc uagccggcuu acgggguccg gucacgcaga uguacucgag ugcugagggg 240
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<210> 7
<211> 162
<212> RNA
<213> Hepatitis C virus

```

```

<220>
<221> misc_feature
<222> (1)..(162)
<223> NS4A protein-coding sequence of hepatitis C virus genomic RNA
        derived from JFH-1 clone

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aaggaggucc ugaugaggc uuuugaugag auggaggaau gc 162

```

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<210> 8
<211> 783
<212> RNA
<213> Hepatitis C virus

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<220>
<221> misc_feature

```

<222> (1)..(783)

<223> NS4B protein-coding sequence of hepatitis C virus genomic RNA
derived from JFH-1 clone

<400> 8

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acucacuacg ugacggaguc ggaugcgucg cagcguguga cccaacuacu uggcucucu 720
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<210> 9

<211> 1398

<212> RNA

<213> Hepatitis C virus

<220>

<221> misc_feature

<222> (1)..(1398)

<223> NS5A protein-coding sequence of hepatitis C virus genomic RNA
derived from JFH-1 clone

<400> 9

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aagggguaca agggugugug ggccggcacu ggcaucauga ccacgcgcug ccuugcggc 180
gccaacaucu cuggcaaugu ccgcccuggc ucuauagga ucacagggcc uaaaaccugc 240
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aaacccccca cgaacuacaa gaccgccauc uggagggugg cggccucgga guacgcggag 360
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 <212> RNA
 <213> Hepatitis C virus

<220>
 <221> misc_feature
 <222> (1)..(1773)
 <223> NS5B protein-coding sequence of hepatitis C virus genomic RNA
 derived from JFH-1 clone

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 acaucaaaaga gcgccucaca gagggcuaaa aagguaacuu uugacaggac gcaagugcuc 180
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 <211> 239
 <212> RNA
 <213> Hepatitis C virus

<220>
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 <222> (1)..(239)
 <223> 3' non-translated region of hepatitis C virus genomic RNA
 derived from JFH-1 clone

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ucuauuucua cuuucuuucu ugguggcucc aucuuagccc uagucacggc uagcugugaa 180
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<210> 12
<211> 9707
<212> RNA
<213> Hepatitis C virus

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<220>
<221> misc_feature
<222> (1)..(9707)
<223> full-length Hepatitis C virus genomic RNA derived from JFH-1
clone

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```

<400> 12
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<223> full-length Hepatitis C virus genomic RNA derived from JFH-1 clone, wherein an amino acid motif GDD has been mutated into GND

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<211> 9707

<212> RNA

<213> Artificial Sequence

<220>

<223> replicon RNA comprising full-length Hepatitis C virus genomic RNA derived from JFH-1 clone, wherein an amino acid motif GDD has been mutated into GND

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